

locality, collected on April 18, 1930, by A. M. Towles; one from Levy County, Fla., collected on April 21, 1930, by O. L. Milan; and one from Orange County, Fla., collected on January 22, 1930, by P. A. Ansley, Jr.

Holotype.—Winged male adult, Cat. No. 44835, U. S. National Museum; two winged adults as autotypes in U. S. National Museum.

A NEW SPECIES OF MOSQUITO FROM COLORADO (DIPTERA, CULICIDAE).

By ROBERT MATHESON.

Aedes klotsi, n. sp.

Female.—Length 6 to 6.5 mm.; length of wing, 4.5 to 5 mm. Proboscis long, slender, brownish-black; palpi short, one-fifth the length of the proboscis, brownish-black, clothed with small brownish scales and a few short brownish hairs. Antennae about as long as the proboscis, with short brownish hairs forming small whorls; the segments clothed with numerous short, narrow, whitish scales; tori black with numerous white scales. Occiput with a broad median area clothed with narrow, curved white scales bordered with narrow, curved brownish-yellow scales; sides with flat, white scales; erect, forked scales numerous, yellowish-white in the middle and brownish at the sides of the occiput. Mesonotum almost black, clothed with numerous curved scales, yellowish-brown predominating on the median area and whitish to yellowish-white on the sides and anterior margin. Pleura and coxae heavily clothed with broad, flat, white scales. Abdomen brownish-black with broad basal segmental white bands, widening on the sides; venter brownish, densely white scaled. Legs brownish-yellow, the tarsal segments being nearly black; femora heavily white scaled especially on the ventral surface; tibiae with a few white scales intermixed with numerous blackish-brown scales; all tarsal segments black. Claw formula, 1.1 – 1.1 – 1.1. Wing scales all narrow, brownish-black to black.

Male.—The general color is practically similar to that of the female. The antennae possess dense whorls of long brownish-yellow hairs. The palpi are slightly longer than the proboscis; the apices of the long segment and the last two segments are blackish-brown; the basal portion of the long segment is yellowish-brown with a more or less distinct ring of whitish scales preceding the black apical part. Length 6.5 mm.; wing, 5 mm. Claw formula, 2.1 – 2.1 – 2.1.

Hypopygium.—The structure of the male hypopygium (Fig. 1) readily separates this species from any known North American species. Side-piece more than three times as long as wide; apical lobe long, rounded, with numerous short outward projecting setae on the dorsal face; a few longer hairs arise from the ventral surface. Basal lobe prominent, triangular, the apex projecting upward; the posterior margin of the triangle forms a narrow ridge which bears a single row of long, densely crowded hairs, the outer two of which are rather stout spines; the first spine is short and the second is extremely long and curving

at the tip. Clasper long, narrow, not expanded in the middle and with a very few very fine setae along its inner margin. Claspette with a stout stem bearing a few short hairs; filament as long as the stem, sharply expanded just before the middle so that the terminal half appears sickle-shaped. Tenth sternites prominent with recurved tips. Phallosome (mesosome) short,



Figure 1

cylindrical, narrowing towards the apex. Lobes of the ninth tergite distinct and each bears 4 to 6 short, stout spines.

Holotype.—1 male, No. 49241, U. S. National Museum. *Allotype*. 1 female, U. S. Nat. Museum. *Paratypes*. 2 males and 1 female in the U. S. Nat. Museum; 6 males and 2 females in the collection of Cornell University. The genitalia of the holotype and the paratypes (males) are mounted on slides. This species was collected by Dr. A. B. Klots and Dr. Elsie B. Klots at Mountain Home Lake, Fort Garland, Colorado, July 20 to 25, 1932. Altitude 8300 feet.

This species falls in my key to the adults (Handbook of the Mosquitoes of North America, 1929) with *cataphylla*, from which it may be separated by its larger size and the color pattern of the mesonotum. In the key to the males it falls with *dorsalis*, from which it may be easily separated by the possession of a short and an extremely long spine on the basal lobe (Fig. 1).

I thought at first that this might prove to be *Aedes cacothius* Dyar which was described from six females taken at Shoshone

Point, Yellowstone National Park, Wyoming (elevation 8200 ft.). However, Dyar describes *cacothius* as a small species and his original description (Ins. Ins. Mens., 11, p. 44, 1923) and that given by him in his Mosquitoes of the Americas (p. 197, 1928) do not agree in several particulars. Through the kindness of Dr. J. M. Aldrich of the U. S. National Museum I have been able to compare my species with one of the type females (only females are known) of *Aedes cacothius*. *A. cacothius* is small, not over 4 mm. in length and the color pattern is distinct from *A. klotsi*. Dr. Klots informs me that this species was collected along the edge of a small, cold, clear, mountain stream. The adults were abundant in the tall grass in the meadow just before the stream emptied into Mountain Home Lake.

A FURTHER NOTE ON THE COLEOPTEROUS GENUS ASERICA (MELOLONTHINAE).

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In a note published in the Proceedings of the Entomological Society of Washington in 1927 (p. 69), I gave the facts which seemed to me to make Brenske's name *Autoserica* a synonym of the previously published name *Aserica*, Lewis, for the great genus of Melolonthine Scarabaeidae which has recently become so well known and important both in the Eastern and Western hemispheres. Mr. E. A. Chapin, in the volume of the same journal for 1932, has published a note contesting that conclusion upon grounds which appear to indicate a misconception of the facts and, in view of the importance of the very large genus in question, a re-statement of the circumstances in clearer terms appears desirable.

The name *Aserica* was introduced by Lewis in 1895 (Ann. Mag. Nat. Hist. (6) 16, p. 394) "for a considerable number of species hitherto included in *Serica*. It differs essentially from *Serica* in having smaller eyes, the scutellum wide at the base, the hind femora considerably widened and truncate at the apices, posterior tibiae also dilated, tarsi more robust and the intermediate coxae widely separated." Two Japanese species in Lewis's own collection were referred to the genus by the names *japonica* Motsch. and *orientalis* Motsch. (which had been assigned to them by Waterhouse in an earlier paper), the limits of size of his specimens of each stated, the first-mentioned species cited as the genotype and a detail drawing from it given to show the essential characters.

Two years later Brenske (Berl. Ent. Zeitschr., 1897, p. 377) formulated the genus *Autoserica*, assigning to it the same essential characters, although in less detail than Lewis had given, and following the latter in including in it the species named